What Is Claimed Is

1.   A method for providing an early warning detection of a bioterrorism event, comprising the steps of:

obtaining an individual's basal metabolic temperature;

comparing the basal metabolic temperature to a detection threshold value; and

identifying a basal metabolic temperature reading surpassing the detection threshold value that indicates a potential infection by a biological warfare agent.

2.   The method for providing an early warning detection of a bioterrorism event of claim 1 wherein the detection threshold value is lower than a normally accepted temperature defined as a low-grade fever.

3.   The method for providing an early warning detection of a bioterrorism event of claim 2 wherein the low-grade fever is defined as a temperature in a range of 100 degrees to 102 degrees Fahrenheit.

4.   The method for providing an early warning detection of a bioterrorism event of claim 1 wherein the biological warfare agent is a Class A agent.

5.   The method for providing an early warning detection of a bioterrorism event of claim 4 wherein the Class A agent is any one of anthrax, smallpox, pneumonic plague, Ebola

hemorrhagic fever, Marburg hemorrhagic fever, Argentine hemorrhagic fever, and tularemia.

6. The method for providing an early warning detection of a bioterrorism event of claim 1 further comprising the step of determining a plurality of detection threshold values that are spaced apart by predetermined values to evaluate any identified potential infection by a biological warfare agent.

7. The method for providing an early warning detection of a bioterrorism event of claim 6 wherein at least one detection threshold value is lower than a normally accepted temperature defined as a low-grade fever.

8. The method for providing an early warning detection of a bioterrorism event of claim 1 wherein the detection threshold value is determined algorithmically based on an individual's normal cyclical changes in basal metabolic temperature.

9. The method for providing an early warning detection of a bioterrorism event of claim 6 wherein the plurality of detection threshold values is determined algorithmically based on an individual's normal cyclical changes in basal metabolic temperature.

10. The method for providing an early warning detection of a bioterrorism event of claim 6 wherein the plurality of detection threshold values is fixed.

11. A method for providing an early warning detection of a bioterrorism event, comprising the steps of:

   obtaining an individual's basal metabolic temperature;

   establishing a plurality of detection threshold values that are spaced apart by predetermined values, with at least one detection threshold value below a normally accepted temperature range defined as low-grade fever;

   comparing the individual's basal metabolic temperature to the plurality of detection threshold values; and

   identifying and evaluating a basal metabolic temperature reading surpassing at least one detection threshold that would indicate a potential infection by a biological warfare agent.

12. The method for providing an early warning detection of a bioterrorism event of claim 11 further comprising the step of determining the plurality of detection threshold values algorithmically based on an individual's normal cyclical changes in basal metabolic temperature.

13. The method for providing an early warning detection of a bioterrorism event of claim 11 wherein the low-grade fever is defined as a temperature in a range of 100 degrees to 102 degrees Fahrenheit.

14. The method for providing an early warning detection of a bioterrorism event of claim 11 wherein the biological warfare agent is a Class A agent.

15.   The method for providing an early warning detection of a bioterrorism event of claim 14 wherein the Class A agent is any one of anthrax, smallpox, pneumonic plague, Ebola hemorrhagic fever, Marburg hemorrhagic fever, Argentine hemorrhagic fever, and tularemia.

16.   A method for providing an early warning detection of a bioterrorism event in a community, comprising the steps of:

    obtaining a basal metabolic temperature for each participant in a plurality of participants representing a sample of the community;

    comparing each participant's basal metabolic temperature to a corresponding detection threshold value for the participant; and

    identifying and evaluating a community-wide potential infection by a biological warfare agent based upon the number of participants having a basal metabolic temperature surpassing the participant's corresponding detection threshold value.

17.   The method for providing an early warning detection of a bioterrorism event in a community of claim 16 wherein the sample of participants of the community is of a statistically significant size.

18.   The method for providing an early warning detection of a bioterrorism event in a community of claim 16 further comprising the step of determining a plurality of detection

threshold values for each participant that are spaced apart by predetermined values to evaluate the participant's potential infection by a biological warfare agent.

19.   The method for providing an early warning detection of a bioterrorism event in a community of claim 18 further comprising the step of determining the plurality of detection threshold values for each participant algorithmically based on the participant's normal cyclical changes in basal metabolic temperature.

20.   The method for providing an early warning detection of a bioterrorism event in a community of claim 19 wherein an algorithm for determining the plurality of detection threshold values includes averaging the basal metabolic temperature of each participant over a time period to establish a first detection threshold spaced apart from the average basal metabolic temperature by a predetermined value.

21.   The method for providing an early warning detection of a bioterrorism event in a community of claim 19 wherein the plurality of detection thresholds are fixed values.

22.   The method for providing an early warning detection of a bioterrorism event in a community of claim 20 wherein the period of time is approximately thirty days.

23.   The method for providing an early warning detection of a bioterrorism event in a community of claim 20 further comprising an algorithm for determining an additional detection threshold value including the steps of:

averaging the basal metabolic temperature of each participant over a time period of approximately 30 days;

averaging the basal metabolic temperatures for each participant that are below the average basal metabolic temperature;

averaging the basal metabolic temperatures for each participant that are above the average basal metabolic temperature; and

establishing a detection threshold value that is spaced apart from the average basal metabolic temperature by a predetermined value when the participant's basal metabolic temperature is below the average basal metabolic temperature and spaced apart from the above-average basal metabolic temperature when the participant's basal metabolic temperature is above the average basal metabolic temperature to provide a detection threshold value that is responsive to a participant's cyclical basal metabolic temperatures.

24. The method for providing an early warning detection of a bioterrorism event in a community of claim 20 further comprising an algorithm for determining an additional detection threshold value including the steps of:

averaging the basal metabolic temperature of each participant over a first time period of approximately 30 days;

averaging the basal metabolic temperatures for each participant that are below the average metabolic temperature;

averaging the basal metabolic temperatures for each participant that are above the average basal metabolic temperature;

determining a switchover point, after a second time period of approximately 30 days, at which the participant's basal metabolic temperature typically changes from basal metabolic temperature readings below the average basal metabolic temperature to basal metabolic temperature readings above the average basal metabolic temperature;

developing an average baseline basal metabolic temperature for each day of a participant's cycle over a plurality of time periods;

establishing a detection threshold value that is spaced apart from the participant's baseline basal metabolic temperatures by a predetermined value to provide a detection threshold value that is responsive to a participant's cyclical basal metabolic temperatures.

25. The method for providing an early warning detection of a bioterrorism event in a community of claim 16 further comprising the step of comparing the average basal metabolic temperature readings of a plurality of participants in a plurality of communities to determine if the plurality of participants in any community has experienced a sudden increase in participant's basal metabolic temperature readings that surpass the participant's threshold detection values.

26. The method for providing an early warning detection of a bioterrorism event in a community of claim 25 wherein the plurality of participants includes all participants of the community.

27. The method for providing an early warning detection of a bioterrorism event in a community of claim 25 wherein the plurality of participants includes a statistically significant number of participants of the community.

28. The method for providing an early warning detection of a bioterrorism event in a community of claim 25 where each of the plurality of communities are drawn from a different geographical region.

29. The method for providing an early warning detection of a bioterrorism event in a community of claim 28 wherein each geographical region has a distinct zip code.

30. The method for providing an early warning detection of a bioterrorism event in a community of claim 16 further comprising the step of comparing the average basal metabolic temperature readings of a plurality of participants in a plurality of communities to determine a percentage increase in participants' basal metabolic temperature readings that exceed the participants' threshold detection values for the plurality of participants in each community.

31. The method for providing an early warning detection of a bioterrorism event in a community of claim 16 further comprising the step of comparing graphically, over a period of time, average basal metabolic temperature readings of a plurality of participants in the community with basal metabolic temperature readings that result during a typical influenza epidemic as an indication of a likelihood that a bioterrorism event has occurred.

32. A method for providing an early warning detection of a bioterrorism attack on an individual, comprising the steps of:

   obtaining a basal metabolic temperature for the individual over a period of time;

   comparing the individual's basal metabolic temperature to a detection threshold value to evaluate the individual's risk of having been infected by a biological warfare agent; and

   determining if the individual actually has been infected by the biological warfare agent.

33. The method for providing an early warning detection of a bioterrorism event in an individual of claim 32 wherein the step of determining actual infection of the individual comprises:

   receiving a throat-swab test for influenza; and

   if the test for influenza is negative, obtaining a blood sample from the individual and testing the blood sample for a suspected biological warfare agent.

34. The method for providing an early warning detection of a bioterrorism event in an individual of claim 32 wherein the detection threshold value is determined algorithmically based on an individual's normal cyclical changes in basal metabolic temperature.

35. The method for providing an early warning detection of a bioterrorism event in an individual of claim 32 further comprising the step of determining a plurality of detection threshold values that are spaced apart by predetermined values to evaluate any identified potential infection by a biological warfare agent.

36. The method for providing an early warning detection of a bioterrorism event in an individual of claim 35 wherein the plurality of detection threshold values is determined algorithmically based on an individual's normal cyclical changes in basal metabolic temperature.

37. A computer readable medium containing a computer program product for providing an early warning detection of a bioterrorism event, the computer program product comprising:

   program instructions that obtain an individual's basal metabolic temperature;

   program instructions that compare the basal metabolic temperature to a detection
      threshold value; and

   program instructions that identify a basal metabolic temperature reading that
      indicates a potential infection by a biological warfare agent.

38.   The computer program product for providing an early warning detection of a bioterrorism event of claim 37 wherein the detection threshold value is lower than a normally accepted temperature defined as a low-grade fever.

39.   The computer program product for providing an early warning detection of a bioterrorism event of claim 37 wherein the low-grade fever is defined as a temperature in a range of 100 degrees to 102 degrees Fahrenheit.

40.   The computer program product for providing an early warning detection of a bioterrorism event of claim 37 wherein the biological warfare agent is a Class A agent.

41.   The computer program product for providing an early warning detection of a bioterrorism event of claim 40 wherein the Class A agent is any one of anthrax, smallpox, pneumonic plague, Ebola hemorrhagic fever, Marburg hemorrhagic fever, Argentine hemorrhagic fever, and tularemia.

42.   The computer program product for providing an early warning detection of a bioterrorism event of claim 37 further comprising program instructions that determine a plurality of detection threshold values that are spaced apart by predetermined values to evaluate any identified potential infection by a biological warfare agent.

43.   The computer program product for providing an early warning detection of a bioterrorism event of claim 42 wherein at least one detection threshold value is lower than a normally accepted temperature defined as a low-grade fever.

44.   The computer program product for providing an early warning detection of a bioterrorism event of claim 37 further comprising program instructions that determine an additional detection threshold value based on an individual's normal cyclical changes in basal metabolic temperature.

45.   The computer program product for providing an early warning detection of a bioterrorism event of claim 42 further comprising program instructions that determine an additional detection threshold value based on an individual's normal cyclical changes in basal metabolic temperature.

46.   A computer readable medium containing a computer program product for providing an early warning detection of a bioterrorism event, the computer program product comprising:

program instructions that obtain an individual's basal metabolic temperature;

program instructions that establish a plurality of detection threshold values that are spaced apart by predetermined values, with at least one detection threshold value below a normally accepted temperature range defined as low-grade fever;

program instructions that compare the individual's basal metabolic temperature to the plurality of detection threshold values; and

program instructions that identify and evaluate a basal metabolic temperature reading that would indicate a potential infection by a biological warfare agent.

47.   The computer program product for providing an early warning detection of a bioterrorism event of claim 46 further comprising program instructions that determine an additional detection threshold value based on an individual's normal cyclical changes in basal metabolic temperature.

48.   The computer program product for providing an early warning detection of a bioterrorism event of claim 46 wherein the low-grade fever is defined as a temperature in a range of 100 degrees to 102 degrees Fahrenheit.

49.   The computer program product for providing an early warning detection of a bioterrorism event of claim 46 wherein the biological warfare agent is a Class A agent.

50.   The computer program product for providing an early warning detection of a bioterrorism event of claim 49 wherein the Class A agent is any one of anthrax, smallpox, pneumonic plague, Ebola hemorrhagic fever, Marburg hemorrhagic fever, Argentine hemorrhagic fever, and tularemia.

51.   A computer readable medium containing a computer program product for providing an
        early warning detection of a bioterrorism event in a community, the computer program
        product comprising:

        program instructions that input a basal metabolic temperature for each participant

            in a plurality of participants representing a sample of the community;

        program instructions that compare each participant's basal metabolic temperature

            to a corresponding detection threshold value for the participant that is

            below a normally accepted temperature defined as a low-grade fever; and

        program instructions that identify and evaluate a community-wide potential

            infection by a biological warfare agent.

52   The computer program product for providing an early warning detection of a bioterrorism
        event in a community of claim 51 wherein the sample of participants of the community is
        of a statistically significant size.

53.   The computer program product for providing an early warning detection of a bioterrorism
        event in a community of claim 47 further comprising program instructions that determine
        a plurality of detection threshold values for each participant that are spaced apart by
        predetermined values to evaluate the participant's potential infection by a biological
        warfare agent.

54.   The computer program product for providing an early warning detection of a bioterrorism
        event in a community of claim 53 further comprising program instructions that determine

an additional detection threshold value for each participant based on the participant's normal cyclical changes in basal metabolic temperature.

55. The computer program product for providing an early warning detection of a bioterrorism event in a community of claim 54 wherein the program instructions that determine the plurality of detection threshold values include program instructions that average the basal metabolic temperature of each participant over a time period to establish a detection threshold spaced apart from the average basal metabolic temperature by a predetermined value.

56. The computer program product for providing an early warning detection of a bioterrorism event in a community of claim 55 wherein the period of time is approximately thirty days.

57. The computer program product for providing an early warning detection of a bioterrorism event in a community of claim 55 wherein the program instructions that determine an additional detection threshold value include:

program instructions that average the basal metabolic temperature of each participant over a time period of approximately 30 days;

program instructions that average the basal metabolic temperatures for each participant that are below the average basal metabolic temperature;

program instructions that average the basal metabolic temperatures for each participant that are above the average basal metabolic temperature; and

program instructions that establish a detection threshold value that is spaced apart from the below average basal metabolic temperature by a predetermined value when the participant's basal metabolic temperature is below the average basal metabolic temperature, and spaced apart from the above average basal metabolic temperature when the participant's basal metabolic temperature is above the average basal metabolic temperature to provide a detection threshold value that is responsive to a participant's cyclical basal metabolic temperatures.

58.   The computer program product for providing an early warning detection of a bioterrorism event in a community of claim 55 wherein the program instructions that determine an additional detection threshold value include:

program instructions that average the basal metabolic temperature of each participant over a first time period of approximately 30 days;

program instructions that average the basal metabolic temperature for each participant that are below the average basal metabolic temperature;

program instructions that average the basal metabolic temperature for each participant that are above the average basal metabolic temperature;

program instructions that determine a switchover point, after a second time period of approximately 30 days, at which the participant's basal metabolic temperature typically changes from basal metabolic temperature readings below the average basal metabolic temperature to basal metabolic temperature readings above the average metabolic temperature;

program instructions that develop an average baseline basal metabolic temperature

for each day of the participant's cycle over a plurality of time periods; and

program instructions that establish a detection threshold value that is spaced apart

from the participant's baseline basal metabolic temperatures by a

predetermined value to provide a detection threshold value that is

responsive to a participant's cyclical basal metabolic temperatures.

59. The computer program product for providing an early warning detection of a bioterrorism

event in a community of claim 58 further comprising program instructions that compare

the average basal metabolic temperature readings of a plurality of participants in a

plurality of communities to determine if the plurality of participants in any community

has experienced a sudden increase in participant's basal metabolic temperature readings

that surpass the participant's threshold detection values.

60. The computer program product for providing an early warning detection of a bioterrorism

event in a community of claim 59 wherein the plurality of participants includes all

participants of the community.

61. The computer program product for providing an early warning detection of a bioterrorism

event in a community of claim 59 wherein the plurality of participants includes a

statistically significant number of participants of the community.

62.   The computer program product for providing an early warning detection of a bioterrorism event in a community of claim 59 where each of the plurality of communities are drawn from a different geographical region.

63.   The computer program product for providing an early warning detection of a bioterrorism event in a community of claim 62 wherein each geographical region has a distinct zip code.

64.   The computer program product for providing an early warning detection of a bioterrorism event in a community of claim 58 further comprising program instructions that compare the average basal metabolic temperature reading of a plurality of participants in a plurality of communities to determine a percentage increase in participants' basal metabolic temperature readings that surpass the participants' threshold detection values for the plurality of participants in the community.

65.   The computer program product for providing an early warning detection of a bioterrorism event in a community of claim 58 further comprising program instructions that compare graphically, over a period of time, average basal metabolic temperature readings of a plurality of participants in the community with basal metabolic temperature readings that result during a typical influenza epidemic as an indication of a likelihood that a bioterrorism event has occurred.

66. A system for providing an early warning detection of a bioterrorism event, comprising:

a telephone server for forwarding basal metabolic temperatures received from a plurality of individuals;

a database server for receiving the basal metabolic temperatures and operative with a database to store the basal metabolic temperatures in a record for each individual; and

a website server for enabling access to the stored records by an early warning detection system administrator.

67. The system for providing an early warning detection of a bioterrorism event of claim 66 further comprising:

a thermometer for determining an individual's basal metabolic temperature and including a transmitter for automatically transmitting the basal metabolic temperature; and

a receiver for receiving the basal metabolic temperature from a plurality of individuals.

68. The system for providing an early warning detection of a bioterrorism event of claim 67 wherein the transmitter transmits the basal metabolic temperature via wireless communications.

69. The system for providing an early warning detection of a bioterrorism event of claim 66 further comprising a computer program operating on the website server and comprising:

an input component for reading an individual's stored basal metabolic temperatures;

an analysis component for establishing a detection threshold value for the individual and comparing a new basal metabolic temperature to the detection threshold value; and

an identification component for identifying a new basal metabolic temperature reading that exceeds the threshold detection value indicating a potential infection by a biological warfare agent.

70.   The system for providing an early warning detection of a bioterrorism event of claim 69 wherein the biological warfare agent is a Class A agent.

71.   The system for providing an early warning detection of a bioterrorism event of claim 69 wherein the analysis component comprises a plurality of modules for establishing threshold detection values that are based on an individual's cyclical changes in basal metabolic temperature.

72.   The system for providing an early warning detection of a bioterrorism event of claim 70 wherein a first module averages the stored basal metabolic temperatures for the individual and establishes a detection threshold spaced apart from the average basal metabolic temperature by a predetermined value.

73. The system for providing an early warning detection of a bioterrorism event of claim 72 wherein a second module averages the basal metabolic temperatures that are above the average basal metabolic temperature, averages the basal metabolic temperatures that are below the average basal metabolic temperature, and determines a threshold detection value that is spaced apart from the average metabolic temperature by a predetermined value corresponding to the above average value and below average value, respectively.

74. The system for providing an early warning detection of a bioterrorism event of claim 73 wherein a third module determines a switchover point, after a plurality of time periods of approximately 30 days, at which the individual's basal metabolic temperature typically changes from basal metabolic temperature readings below the average basal metabolic temperature to basal metabolic temperature readings above the average basal metabolic temperature; develops an average baseline basal metabolic temperature for each day of the individual's cycle over the plurality of time periods; and establishes a detection threshold value that is spaced apart from the individual's baseline basal metabolic temperatures by a predetermined value to provide a detection threshold value that is responsive to the individual's cyclical basal metabolic temperatures.

75. The system for providing an early warning detection of a bioterrorism event of claim 66 further comprising:

a thermometer for determining an individual's basal metabolic temperature; and

a communications device for sending the basal metabolic temperature to a server device.

76.   The system for providing an early warning detection of a bioterrorism event of claim 75 wherein the communication device is any one of a telephone, a personal computer, a personal digital assistant, a laptop computer, a handheld device, and a workstation.

77.   The system for providing an early warning detection of a bioterrorism event of claim 75 wherein the server device is a telephone server connected to multiple incoming telephone lines.

78.   The system for providing an early warning detection of a bioterrorism event of claim 75 wherein the server device is a website server that communicates with the communication device over a public network.

79.   The system for providing an early warning detection of a bioterrorism event of claim 75 wherein the server device is a website server that communicates with the communication device over a private network.

80.   The system for providing an early warning detection of a bioterrorism event of claim 78 wherein the public network is the Internet.

81.   A method for providing an early warning detection of a potential infection, comprising the steps of:

        obtaining an individual's basal metabolic temperature;

comparing the basal metabolic temperature to a detection threshold value; and

identifying a basal metabolic temperature reading surpassing the detection threshold value that indicates a potential infection.

82. The method for providing an early warning detection of claim 81 wherein the potential infection is caused by a biological warfare agent.

83. The method for providing an early warning detection of claim 81 wherein the potential infection is caused by an influenza virus.

84. A method for providing an early warning detection of a potential infection in a community, comprising the steps of:

obtaining a temperature reading for each participant in a plurality of participants that are members of the community;

comparing each participant's temperature to a detection threshold value; and

identifying and evaluating a community-wide potential infection based upon the number of participants having a temperature surpassing the detection threshold value.

86. The method for providing an early warning detection of a potential infection in a community of claim 84 wherein the plurality of participants from the community is of a statistically significant size.

87. The method for providing an early warning detection of a potential infection in a community of claim 85, further comprising the step of determining a plurality of detection threshold values that are spaced apart by predetermined values to evaluate each participant's potential infection.